

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Original) A radial vibration detection apparatus for detecting the radial vibration value of an optical assembly of an optical disc drive, the optical assembly having a turntable, the turntable having a first part and a second part connected thereto, the first part having an iron element and a plurality of clamp elements extended to the second part, the radial vibration detection apparatus comprising:

a cover having a cover body, a plurality of engaging elements and a circumferential flange, the engaging elements disposed on the lower surface of the cover body in an equiangular manner, the circumferential flange is formed on the cover body, the cover body having a magnet accommodating portion formed on the center thereof, wherein a first positioning element is disposed on the circumferential flange, and each of the engaging elements has a first sloped surface and a through hole;

a magnet disposed in the magnet accommodating portion;

a plurality of clamping structures sliding and disposed in the through holes of the engaging elements, respectively; and

a base disposed under the cover and having a bottom, a circumferential wall and a second positioning element, the circumferential wall upwardly formed on the bottom, the second positioning element disposed on the circumferential wall to engage the first positioning element disposed

on the circumferential flange of the cover, wherein the bottom is formed with a fitting hole and a plurality of through grooves, the fitting hole formed on the center of the bottom and accommodating the turntable, and the through grooves formed on the bottom in a radial and equiangular manner and corresponding to the clamp elements of the turntable.

2. (Original) The radial vibration detection apparatus as claimed in claim 1, wherein each clamping structure further comprises a linking shaft, a retardant element and a retaining element, the linking shaft fitted in the through hole of each engaging element, the retardant element and retaining element connected to two opposite ends of the linking shaft, respectively, and the retardant element pushing against the second part of the turntable.

3. (Original) The radial vibration detection apparatus as claimed in claim 1, wherein the first positioning element is a through hole.

4. (Original) The radial vibration detection apparatus as claimed in claim 3, wherein the second positioning element is a column.

5. (Original) The radial vibration detection apparatus as claimed in claim 1, wherein the first positioning element is a column.

6. (Original) The radial vibration detection apparatus as claimed in claim 5, wherein the second positioning element is a through hole.

7. (Original) The radial vibration detection apparatus as claimed in claim 2, wherein the retardant element further comprises a second sloped surface matching the first sloped surface of each engaging element.

8. (Original) The radial vibration detection apparatus as claimed in claim 1, wherein the bottom of the base further comprises a plurality of spaced portions, the engaging elements located on the spaced portions.

9. (Original) The radial vibration detection apparatus as claimed in claim 1, further comprising a measuring tool placed on the outer surface of the circumferential wall of the base to detect the radial vibration value.

10. (Original) The radial vibration detection apparatus as claimed in claim 9, wherein the measuring tool is a probe.